

Notice of Allowability

Application No.

10/089,514

Applicant(s)

YANAI ET AL.

Examiner

Chih-Min Kam

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/31/06.
2. ☒ The allowed claim(s) is/are 1,5,17,20,21,23 and 25-37.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 5/24/06
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

DETAILED ACTION

1. The Request for Continued Examination (RCE) filed on April 18, 2006 under 37 CFR 1.114 is acknowledged. An action on the RCE follows.

Status of the Claims

2. Claims 1, 5, 17, 19-21, 23 and 25-37 are pending.

Applicants' amendment filed May 31, 2006 is acknowledged. Applicants' response has been fully considered. Claims 1, 23, 25 and 33 have been amended, and claims 6-7 have been cancelled. Claims 23 and 25, which are directed to a method of producing a peptide or depsipeptide, are being considered in this Office Action. Therefore, claims 1, 5, 17, 19-21, 23 and 25-37 are examined.

Withdrawn Claim Rejections - 35 USC § 112

3. The previous rejection of claims 1, 5-7, 19-21, 26, 28, 30, 32, 33 and 35-37 under 35 U.S.C. 112, first paragraph, written description, is withdrawn in view of applicants' amendment to the claim, applicants' cancellation of the claim, and applicants' response at pages 9-11 in the amendment filed May 31, 2006.
4. The previous rejection of claims 1, 5-7, 17, 19-21, 32, 33 and 35-37 under 35 U.S.C. 112, first paragraph, scope of enablement, is withdrawn in view of applicants' amendment to the claim, applicants' cancellation of the claim, and applicants' response at pages 9-11 in the amendment filed May 31, 2006.
5. The previous rejection of claims 1, 5-7, 19-21, 33 and 35-37, under 35 U.S.C. 112, second paragraph, is withdrawn in view of applicants' cancellation of the claim, and applicant's amendment to the claim in the amendment filed May 31, 2006.

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Withdrawn Claim Rejections - 35 USC § 102

6. The previous rejection of claims 26, 28 and 30 under 35 U.S.C. 102(b) as anticipated by Blanc *et al.* (Mol. Microbiology 23, 191-202 (1997)), is withdrawn in view of applicants' amendment to the claim, and applicants' cancellation of the claim in the amendment filed May 31, 2006.

Examiner's Amendment

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jay Williams on June 22, 2006.

Examiner's Amendments to the Specification:

Please add the following paragraph after the title at page 1 of the specification:

This application is a 371 of PCT/JP00/06783 filed September 29, 2000, which claims the foreign priority of Japan 11/276314 filed September 29, 1999.

Examiner's Amendments to the Claims:

Cancel claim 19.

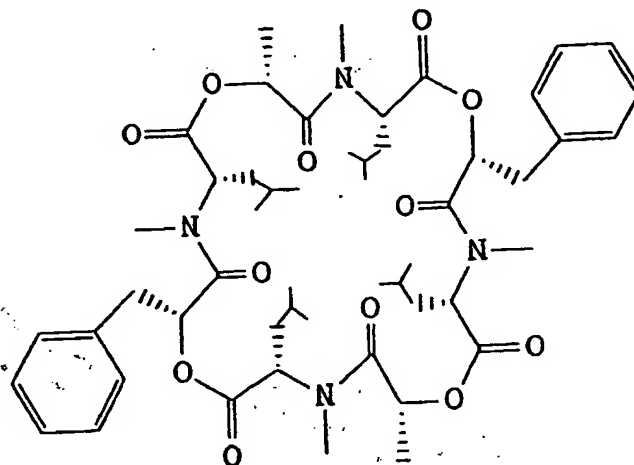
Claims 1 and 20 have been amended as follows.

1. (Currently amended) A transformant of a microorganism, wherein the transformant is produced ~~the microorganism is transformed~~ by introducing (i) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 2, (ii) a polynucleotide encoding the amino

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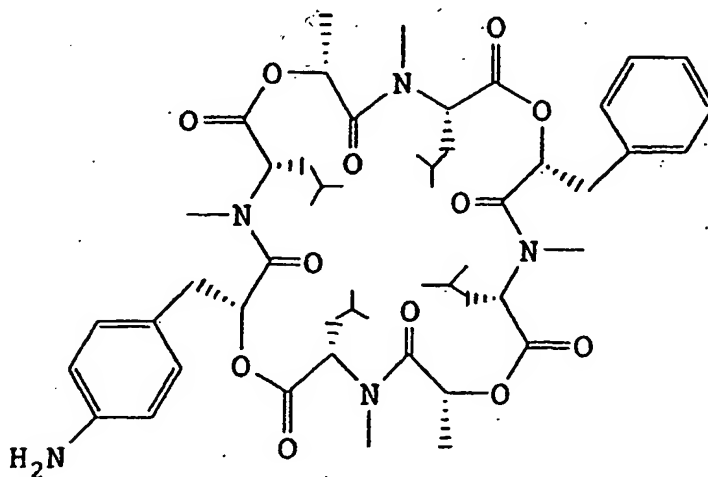
acid sequence of SEQ ID NO: 4, and (iii) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 6, into the microorganism,

wherein the microorganism to be transformed produces a peptide or a depsipeptide, which is substance PF1022 ([cyclo (D-lactyl-L-N-methylleucyl-D-3-phenyllactyl-L-N-methylleucyl-D-lactyl-L-N-methylleucyl-D-3-phenyllactyl-L-N-methylleucyl)]) represented by the following formula:



, and

wherein the transformant produces a derivative of substance PF1022 represented by the following formula:



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20. (Currently amended) The transformant according to claim 19 33, wherein Mycelia sterilia is strain PF1022 deposited with the National Institute of Bioscience and Human-Technology under an accession number of FERM BP-2671.

The following is an **Examiner's Statement of Reasons for Allowance**:

The following reference appears to be the closest art to the claimed invention. Blanc *et al.* teach the papA gene of *Streptomyces pristinaespiralis* (nucleotides 68-2227) which encodes 4-amino-4-deoxychorismic acid synthase; the papB gene of *Streptomyces pristinaespiralis* (nucleotides 3413-3802), which encodes 4-amino-4-deoxychorismic acid mutase; and the papC gene of *Streptomyces pristinaespiralis* (nucleotides 2486-3376), which encodes 4-amino-4-deoxyprephenic acid dehydrogenase. However, the papA gene does not encode the amino acid sequence of SEQ ID NO:2, the papB gene does not encode the amino acid sequence of SEQ ID NO:4, and the papC gene does not encode the amino acid sequence of SEQ ID NO:6. Therefore, the claims are allowable over the art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Chih-Min Kam, Ph. D.

Primary Patent Examiner

A handwritten signature in black ink, appearing to read 'Chih-Min', with a long horizontal stroke extending to the right.

CHIH-MIN KAM
PATENT EXAMINER

CMK

June 22, 2006